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217 FISHER CHR	7590 01/11/2008 ISTEN & SABOL	3	EXAMINER	
1725 K STREET, N.W.			SASAN, ARADHANA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/501,395	LICHTENBERG ET AL.			
		Examiner	Art Unit			
· · · · · · · · · · · · · · · · · · ·		Aradhana Sasan	1615			
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)🔯	Responsive to communication(s) filed on 23 Oc	ctober 2007.				
	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
4)⊠	Claim(s) <u>1-33</u> is/are pending in the application.					
,	4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.					
	6)⊠ Claim(s) is/are allowed. 6)⊠ Claim(s) <u>1-33</u> is/are rejected.					
	•					
	7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
٥/١	orann(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
10)	The drawing(s) filed onis/ are: a)☐ acce	epted or b)□ objected to by the E	Examiner.			
	Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119	•				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2)	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 10/23/07.	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

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### **DETAILED ACTION**

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# Status of Application

- 1. The remarks and amendments filed on 10/23/2007 are acknowledged.
- 2. Claims 1 to 33 were amended and are included in the prosecution.

### Response to Arguments

## **Information Disclosure Statement**

3. The information disclosure statement (IDS) submitted on 10/23/2007 is acknowledged. See attached copy of PTO-1449.

### Rejection of claims 11 and 29-33 under the second paragraph of 35 USC § 112

4. In light of applicant's amendment of claims 11 and 29-33 (regarding the utilization against the three stated viruses in an alternative listing), the rejection under the second paragraph of 35 USC § 112 is withdrawn.

# Rejection of claims 1-33 under the second paragraph of 35 USC § 112 and 35 U.S.C. 101

- 5. In light of applicant's amendment of claims 1-17 and 20-33 (regarding the "process of utilizing"), the rejection under the second paragraph of 35 USC § 112 and 35 U.S.C. § 101 is withdrawn.
- 6. However, since amended claims 18 and 19 do not recite the "process of utilizing", the rejection for these specific claims under the second paragraph of 35 USC § 112 and 35 U.S.C. § 101 will be maintained.

Rejection of claims 1-10 and 12-28 under 35 USC § 103(a)

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7. Applicant's arguments, see Pages 10-16, filed 10/23/2007, with respect to the rejection of claims 1-10 and 12-28 under 35 USC § 103(a) as being unpatentable over McCue et al. (US 5,908,854) have been fully considered but are not persuasive.

Applicant argues that McCue requires the presence of a solvent that is phenoxyalcohols and/or glycol ethers. However, instant claims have the term "comprising" which allows for the presence of these solvents.

Applicant argues that McCue has a significantly later date than Bellamy. This does not matter, as long as both references are prior art.

Applicant argues that McCue is not combinable in the search for applicants' claimed invention and that without the required solvents of McCue, the McCue system/invention is ineffective and destroyed. Applicant argues that McCue cannot be used by itself because Bellamy is present and its negative effect thereon cannot be ignored under Section 103(a). This is not found persuasive because McCue clearly states that water may be included to dilute the compositions (McCue Col. 4, lines 43-45), and thus, one does not destroy the efficacy of the composition.

Applicant argues that applicants claim a process of using specifically-defined disinfectant compositions as a virucidal agent and that the examiner has incorrectly attempted to generify applicants' specific process. Applicant argues that the statement in the Office Action that "the disinfectant composition comprises (a) an amine (la) or a quaternary ammonium compound (lb) and (b) at least one alkanolamine (11), in the mass ratio 1:11 of 20:1 to 1:20" is an incorrect attempt to generify applicants' specific

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ingredients/chemicals. Applicant argues that specifically defined compounds are required by applicants' claims, not the generic approach taken by this rejection.

However, the substituents in applicant's claims (e.g. R¹-R⁵ can be alkyl) lead to a generic quaternary ammonium compound and an alkanolamine. McCue teaches that many quaternary ammonium compositions "exhibit broad spectrum bactericidal, fungicidal and virucidal activity ..." (Col. 1, lines 11-16). The property of virucidal activity is implicit to the composition comprising a quaternary ammonium compound even thought the reference fails to use the composition as a virucide. Applicant has failed to show that the composition of McCue is not virucidal.

Applicant argues that no prior art teaching any virucidal activity of quaternary disinfectant compositions is specifically cited in McCue and the expression "quaternary disinfectant composition" merely means a composition containing a quaternary ammonium compound. Applicant argues that nowhere in McCue is there any teaching that the alleged virucidal activity of those unspecified compositions is caused by the quaternary ammonium compound and not by another ingredient, e.g., by a virucidal agent known in the art. Applicant argues that McCue is completely silent on the virucidal activity; McCue directs one ordinarily skilled in the art away from applicants' claimed invention, and that McCue is not a relevant reference in the quest for applicants' claimed process. Applicant also argues that there is no suggestion or teaching to use the McCue compositions against viruses or that they would be virucidal.

Although McCue does not expressly teach the use of the composition against viruses, this does not mean that the composition of McCue is not effective against

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viruses. Conversely, it implies that the virucidal effect is easier than the mycobactericidal effect. A person having ordinary skill in the art at the time the invention was made would have arrived at the conclusion that using the McCue composition would have a virucidal effect and also have a broad spectrum bactericidal and fungicidal effect.

Applicant argues that the McCue teaching of an alkanolamine compound, such as "mono-, di- or tri-ethanolamine" is of no meaning since McCue directs away from virucidal compositions. McCue clearly teaches mono-, di- or tri-ethanolamine (which read on the alkanolamine of instant claims). The discussion of the relevance of the McCue teaching with respect to the use of quaternary disinfectant compositions for broad spectrum bactericidal, fungicidal and virucidal activity is stated above. Therefore, the argument that McCue's teaching of an alkanolamine is "of no meaning" is unclear.

Applicant argues that there is no support for the statement regarding the obviousness of the mass ratio of quaternary ammonium compound to alkanolamine as 20:1 to 1:20. Applicant argues that regarding the mass ratio limitation of instant Claims 4, 13, 14, and 15, the Examiner cannot make any statement regarding one ordinarily skilled in the art and that he does not know what is the ordinary level of skill in the art. Applicant argues that a wrong standard was used regarding varying the ratio of the quaternary ammonium compound and the alkanolamine in the process of routine experimentation in order to achieve the desired virucidal or disinfectant activity.

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Although McCue does not expressly teach the mass ratio of quaternary ammonium compound to alkanolamine as 20:1 to 1:20, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to arrive at the claimed mass ratio during the process of routine experimentation to optimize the desired virucidal or disinfectant activity. McCue teaches a mass ratio of quaternary ammonium compound to alkanolamine of 1:7.7 (Ex. 1 and Ex. 3) and 1:39 (Ex. 4). Section 2144.05 of MPEP states: "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)".

Applicant argues that Section 103(a) deals with one ordinarily skilled in the art, not one skilled in the art. The examiner recognizes that Section 103(a) deals with a person having ordinary skill in the art.

Applicant argues that this rejection is faulty on its face because the Examiner has not factually resolved, as is mandatory in the record the level of ordinary skill in the art. However, the examiner considered:

(1) The scope and content of the prior art (McCue teaches that many quaternary ammonium compositions "exhibit broad spectrum bactericidal, fungicidal and virucidal activity ..." (Col. 1, lines 11-16),

(2) The differences between the claimed invention and the prior art (McCue does not expressly teach the process of utilizing the composition against parvoviruses, picornaviruses or polioviruses),

- (3) The level of ordinary skill in the pertinent art (a person having ordinary skill in the art would know how to titrate the composition in order to maintain the disinfecting efficacy), and
- (4) Objective evidence relevant to the issue of obviousness (McCue teaches that the compositions may be applied to a surface which is need of disinfection (Col. 5, lines 54-56)).

Applicant argues that the McCue teaching of didecyl dimethyl ammonium chloride as being obvious to one skilled in the art as a quaternary ammonium salt is meaningless - wrong standard. Applicant does not explain why this teaching of a quaternary ammonium salt is meaningless and wrong. Therefore, the examiner maintains that McCue teaches a quaternary ammonium salt.

Applicant argues that the statement of the McCue teaching of an ethanolamine such as mono-, di or tri-ethanolamine as being obvious to one skilled in the art as an alkanolamine compound is in error and the Examiner has not factually resolved the ordinary level of skill in the art, hence he knows nothing about one ordinarily skilled in the art or what would be obvious to such to such a person. However, as shown above, the examiner determined the ordinary level of skill in the art and since McCue teaches an alkanolamine, the rejection will be maintained.

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Applicant argues that the Examiner has not made all of the required factual inquiries of the Graham decision regarding the limitation of water as a solvent for the disinfectant composition of instant Claims 5, 16, 17, and 18

Applicant argues that the examiner has no basis for any statement re one ordinarily skilled in the art with respect to the composition comprising aids of instant Claims 6, 19, and 20. The basis for the statement is that McCue teaches optional ingredients in the composition including fragrances, surfactants, and chelating agents (Col. 4, lines 23-26). A person having ordinary skill in the art at the time the invention was made would have understood from this McCue teaching that these optional components can be added to the disinfectant composition and still retain the disinfection effect. A person having ordinary skill in the art would add fragrance or color depending on the desired attributes of the application without altering the disinfectant or germicidal activity of the composition comprising quaternary ammonium compounds.

Applicant argues that no Graham inquiry was made of ordinary skill regarding the surface disinfection and instrument disinfection of instant Claims 7, 21 and 22 (as well as for the limitations of laundry disinfection, hand disinfection, and in chemical toilets of claims 8 to 10 and 23 to 28). Applicant argues that dependent claims are unobvious since the independent claim is unobvious.

However, the demonstration of the consideration of the Graham factual inquiry is stated above. Since McCue teaches the use of the composition to disinfect instruments, apparatuses and in a wide variety of environments which may benefit from a disinfecting effect (Col. 4, lines 51-53), a person having ordinary skill in the art at the time the

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invention was made would have found it obvious to use the composition for laundry disinfection, hand disinfection, and in chemical toilets (which are all environments that may benefit from a disinfecting effect).

Therefore, the rejection of 4/23/07 is maintained.

# Rejection of claims 11 and 29-33 under 35 USC § 103(a)

Applicant's arguments, see Page 10 and 16-18, filed 10/23/2007, with respect to the rejection of claims 11 and 29-33 under 35 USC § 103(a) as being unpatentable over McCue et al. (US 5,908,854) in view of Bellamy et al. (WO 94/22305) have been fully considered but are not persuasive.

Applicant argues that McCue et al. directs one ordinarily skilled in the art away from the use of a virucidal agent. McCue et al. does not teach the use of its composition against any viruses. As stated above, although McCue does not expressly teach the use of the composition against viruses, this does not mean that the composition of McCue is not effective against viruses. Conversely, it implies that the virucidal effect is easier than the mycobactericidal effect. A person having ordinary skill in the art at the time the invention was made would have arrived at the conclusion that using the McCue composition would have a virucidal effect and also have a broad spectrum bactericidal and fungicidal effect.

Applicant argues that Bellamy et al. does not cure the defects of McCue.

However, McCue does not expressly teach the use of the composition against viruses.

Bellamy expressly teaches a virucidal composition suitable as a hospital disinfectant, comprising alkaline material and an alkyl quaternary nitrogen salt, effective for killing

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polioviruses and disinfecting heat sensitive medical instruments (Abstract). Therefore, to a person having ordinary skill in the art, Bellamy cures the deficiency of McCue.

Applicant argues that the compositions of the instant application do not contain ethoxylated alkylphenols. However, instant claims have the term "comprising" which allows for the presence of these solvents.

Applicant argues that a person of ordinary skill in the art will recognize that the last part of the statement (Col. 4, lines 38 to 40) is wrong scientifically and factually since viruses do not have a cell wall. The examiner recognizes the error in the McCue reference regarding the fact that viruses do not have cell walls.

Applicant argues that claim 1 is unobvious so these dependent claims are also unobvious and that one ordinarily skilled in the art would not consider Bellamy et al. to be a relevant reference. Applicant argues that one ordinarily skilled in the art has no basis for paying no attention to core assertions of the later McCue et al.

However, although McCue does not expressly teach the use of the composition against viruses, this does not mean that the composition of McCue is not effective against viruses. Conversely, it implies that the virucidal effect is easier to achieve than the mycobactericidal effect. A person having ordinary skill in the art at the time the invention was made would have arrived at the conclusion that using the McCue composition would have a virucidal effect and also have a broad spectrum bactericidal and fungicidal effect.

Applicant argues that regarding the combination of the use of the disinfectant composition taught by McCue with the virucidal (particularly against poliovirus) Bellamy

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composition, the examiner cannot make any statements re one ordinarily skilled in the art. Applicant argues that both references are not relevant and McCue directs away from applicants' claimed invention.

However, since the question of obviousness was resolved on the basis of the Graham factual inquiries, the examiner can make statements about a person having ordinary skill in the art (see discussion above).

Regarding the combination of references, all the claimed elements are found in McCue and Bellamy and one skilled in the art could have combined the elements and the combination would have yielded predictable results. See *KSR International Co. v. Teleflex Inc.*, 550 U.S. - , 82 USPQ2d 1385 (2007).

Therefore, the rejection of 4/23/07 is maintained.

### **MAINTAINED REJECTIONS:**

The following is a list of maintained rejections:

## Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims 18-19 do not recite a "process for utilizing" a disinfectant composition and are therefore indefinite.

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Claims 18-19 are rejected under 35 U.S.C. 101 because of the lack of a recitation of a process.

## Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 1-10, and 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCue et al. (US 5,908,854).

The claimed invention is a process of using of a disinfectant composition comprising (a) an amine (formula la) or a quaternary ammonium compound (formula lb) and (b) at least one alkanolamine (formula ll), in the mass ratio I:II of 20:1 to 1:20. The disinfectant composition is used as a virucidal agent. The virucidal agent is used against parvoviruses, picornaviruses, or polioviruses.

McCue teaches a composition effective against mycobacteria, and methods for using the composition (Abstract). The composition comprises about 0.1% wt. to about 25% wt. of a germicidal cationic quaternary compound, about 0.25% wt. to about 25% wt. of a solvent and water (Abstract).

McCue does not expressly teach the mass ratio of quaternary ammonium compound to alkanolamine as 20:1 to 1:20 or the use of the composition against parvoviruses or picornaviruses or polioviruses.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the composition comprising a germicidal quaternary ammonium compound, and an alkanolamine as a disinfectant, as suggested by McCue, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because although McCue does not expressly teach the use of the composition against viruses, this does not mean that the composition of McCue is not effective against viruses. Conversely, it implies that the virucidal effect is easier to achieve than the mycobactericidal effect. A person having ordinary skill in the art at the time the invention was made would have arrived at the conclusion that using the McCue composition would have a virucidal effect and also have a broad spectrum bactericidal and fungicidal effect.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Instant claim 1 recites limitations of the composition comprising (a) an amine (Ia) or quaternary ammonium salt (Ib) and (b) at least one alkanolamine of formula II.

Substituents for the compounds are recited. McCue teaches quaternary ammonium compounds and salts thereof including quaternary ammonium germicides. The substituents (R<sub>1</sub> to R<sub>4</sub>) of the quaternary ammonium compounds taught by McCue are

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hydrophobic, aliphatic, aryl aliphatic or aliphatic aryl radical of from 6 to 26 carbon atoms (Col. 2, lines 11-35). McCue teaches an alkanolamine compound, such as "mono-, di- or tri-ethanolamine" (Col. 4, lines 13-16). Although McCue does not specifically teach the mass ratio of quaternary ammonium compound to alkanolamine as 20:1 to 1:20, it would have been obvious to one skilled in the art to arrive at the claimed mass ratio during the process of routine experimentation to optimize the desired virucidal or disinfectant activity. Also, McCue teaches that many quaternary ammonium compositions "exhibit broad spectrum bactericidal, fungicidal and virucidal activity ..." (Col. 1, lines 11-16). Therefore, a person having ordinary skill in the art would find it obvious that the instant invention would be effective as a virucidal agent.

Regarding instant claim 2, McCue teaches didecyl dimethyl ammonium chloride (Col. 3, line 15-16). Since the instant claims recite the composition comprising an amine and/or a quaternary ammonium salt, a person having ordinary skill in the art would find it obvious to recognize the didecyl dimethyl ammonium chloride taught by McCue as a quaternary ammonium salt (which is part of the instant composition).

The alkanolamine limitation of instant claims 3 and 12 would have been obvious to one of ordinary skill in the art over the McCue teaching of "an alkanolamine compound, particularly an ethanolamine such as mono-, di or tri-ethanolamine" (Col. 4, lines 13-16).

Regarding the mass ratio limitation of instant claims 4, 13, 14, and 15, although McCue does not expressly teach the mass ratio of quaternary ammonium compound to alkanolamine as 20:1 to 1:20, it would have been obvious to a person having ordinary

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skill in the art at the time the invention was made to arrive at the claimed mass ratio during the process of routine experimentation to optimize the desired virucidal or disinfectant activity. McCue teaches a mass ratio of quaternary ammonium compound to alkanolamine of 1:7.7 (Ex. 1 and Ex. 3) and 1:39 (Ex. 4). Section 2144.05 of MPEP states: "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)".

The limitation of water as a solvent for the disinfectant composition of instant claims 5, 16, 17, and 18 would have been obvious to one of ordinary skill in the art over the McCue teaching of "compositions ... dilutable in a larger volume of water" (Col. 4, lines 43-45).

The limitation of the composition comprising aids of instant claims 6, 19, and 20 would have been obvious to one of ordinary skill in the art over the McCue teaching of optional ingredients in the composition including "fragrances, surfactants, ... chelating agents, ..." (Col. 4, lines 23-26). A person having ordinary skill in the art at the time the invention was made would have understood from this McCue teaching that these optional components can be added to the disinfectant composition and still retain the disinfection effect. A person having ordinary skill in the art would add fragrance or color

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depending on the desired attributes of the application without altering the disinfectant or germicidal activity of the composition comprising quaternary ammonium compounds.

The limitation of surface disinfection and instrument disinfection of instant claims 7, 21, and 22 would have been obvious to one of ordinary skill in the art over the McCue teaching of using the compositions "in a wide variety of disinfecting applications, and in a wide variety of environments which may benefit from a disinfecting effect" (Col. 4, lines 51-53). McCue further teaches "disinfection of instruments and apparatuses, ... disinfection or decontamination of hospital environments including lavatories and lavatory fixtures, ..." (Col. 4, lines 55-64). Similarly, one with ordinary skill in the art would find it obvious to use the disinfectant composition of the instant application in laundry disinfection, hand disinfection, and in chemical toilets (limitations of instant claims 8-10 and 23-28), which are all environments that may benefit from a disinfecting effect.

13. Claims 11, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCue et al. (US 5,908,854), in view of Bellamy et al. (WO 94/22305).

The teaching of McCue is stated above.

McCue does not specifically teach the use of the composition against parvoviruses, picornaviruses, or polioviruses.

Bellamy et al. teach an aqueous virucidal composition suitable as hospital disinfectant, comprising alkaline material and an alkyl quaternary nitrogen salt, effective for killing polioviruses and disinfecting heat sensitive medical instruments (Abstract).

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Bellamy uses dialkyl dimethyl quaternary ammonium chloride as an example (Page 5, lines 15-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the composition comprising a germicidal quaternary ammonium compound, and an alkanolamine as a disinfectant, as suggested by McCue, combine it with the virucidal composition, as suggested by Bellamy, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Bellamy demonstrates the effectiveness of the anti-viral disinfectant composition, particularly against poliovirus (Page 8, lines 1-7).

Regarding instant claims 11 and 29-33, the limitation of the virucidal agent utilized against parvoviruses, picornaviruses or polioviruses would have been obvious to one of ordinary skill in the art over the effectiveness of the anti-viral disinfectant composition, particularly against poliovirus as taught by Bellamy (Page 8, lines 1-7).

#### Conclusion

- 14. No claims are allowed.
- 15. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradhana Sasan whose telephone number is (571) 272-9022. The examiner can normally be reached Monday to Thursday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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